

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ROSS S. DANDO, CRAIG M. CARPENTER, and  
GARO J. DERDERIAN

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Appeal 2007-3677  
Application 10/087,558  
Technology Center 1700

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Decided: November 29, 2007

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Before BRADLEY R. GARRIS, CHARLES F. WARREN, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 14-21, 31-38, and 45-61. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellants claim a reactive precursor feeding manifold assembly comprising a body 12 with a plenum chamber 14, precursor inlets 21-24, a

purge gas inlet 16, which is upstream of and angled from the precursor inlets such that a purge-gas flow through the purge gas inlet provides a venturi effect within the plenum chamber relative to the precursor inlets, and a plenum chamber outlet 68 configured to connect with a substrate processing chamber (Fig. 1).

Representative claim 14 reads as follows:

14. A reactive precursor feeding manifold assembly, comprising:
- a body comprising a plenum chamber;
  - a first precursor feed stream on the body in fluid communication with the plenum chamber at a first precursor inlet to the plenum chamber;
  - a second precursor feed stream on the body in fluid communication with the plenum chamber at a second precursor inlet to the plenum chamber;
  - a purge gas stream on the body in fluid communication with the plenum chamber at a purge gas inlet to the plenum chamber which is upstream of both the first and the second plenum chamber precursor inlets and angled from the plenum chamber precursor inlets such that a purge-gas flow through the purge gas inlet provides a venture effect within the plenum chamber relative to the first and second precursor inlets; and
  - the body comprising a plenum chamber outlet configured to connect with a substrate processing chamber.

References set forth below are relied upon by the Examiner as evidence of unpatentability:

Onda	5,395,482	March 7, 1995
Srivastava	6,225,745 B1	May 1, 2001

Claims 14-17, 19-21, 31, 32, 34, 37 and 38 are rejected under 35 U.S.C. § 102(a) as being anticipated by Srivastava.

Claims 18, 33, 35, 36 and 45-61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Srivastava in view of Onda.

We will sustain each of these rejections based on the Examiner's well stated findings of fact, conclusions of law and rebuttals to argument which we adopt as our own. We add the following comments for emphasis.

A prior art reference may anticipate application claims even though it does not address the claimed use since recitation of a new intended use for an old product does not make the claim to that old product patentable. *In re Schrieber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). Moreover, a prior art reference may be from an entirely different field of endeavor from that of the claimed invention or may be directed to an entirely different problem from that addressed by the inventor, yet the reference will still anticipate if it explicitly or inherently discloses every limitation recited in the claims. *Id.*, 128 F.3d at 1478. In addition, a determination that functional limitations in a claim are inherently possessed by the prior art is proper when the embodiment of the prior art and the embodiment depicted in an application figure have the same general shape. *Id.*

These legal principles reveal the propriety of the Examiner's findings of fact expressed in the Answer including the attachment thereto of an annotated copy of Srivastava's Figure 1b. Specifically, with respect to this prior art figure, Srivastava explicitly or inherently discloses each of the structural and functional claim limitations argued by Appellants in their Brief. For example, as depicted in the previously mentioned annotated copy of Figure 1b, the prior art apparatus satisfies the Appellants' claim limitations relating to a plenum chamber and a venturi effect since the

embodiment depicted in Figure 1b and the embodiment shown in Appellants' Figure 1 has the same general shape and arrangement of parts. This last mentioned point reasonably supports the Examiner's determination that the prior art embodiment includes the features of a plenum chamber and a venturi effect as required by the appealed claims.

For the above stated reasons and more particularly for the reasons expressed in the Answer, there is no convincing merit in Appellants' arguments concerning independent claims 14, 31, and 45.<sup>1</sup> We hereby sustain, therefore, the § 102 rejection based on Srivastava as well as the § 103 rejection based on Srivastava in view of Onda.<sup>2</sup>

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

tc/lr

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<sup>1</sup> The dependant claims on appeal have not been separately argued.

<sup>2</sup> Appellants have not contested with any reasonable specificity the Examiner's proposed combination of Srivastava and Onda.